



Enlivening Science Communications

June 9, 2010

**You can have the
greatest idea,**

**but if you can't
communicate it,**

it doesn't matter.



What's The Problem?

We live in the age of interactive multimedia...

but much of science is still stuck in dense text format.

1687-2010

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Abstract [Top](#)

Many duplicate genes maintain functional overlap despite divergence over long evolutionary time scales. Deleting one member of a paralogous pair often has no phenotypic effect, unless its paralog is also deleted. It has been suggested that this functional compensation might be mediated by active up-regulation of expression of a gene in response to deletion of its paralog. However, it is not clear how prevalent such paralog responsiveness is, nor whether it is hardwired or dependent on feedback conditions. Here, we address these questions at the genomic scale using cytometry of single-cell protein levels in differentially labeled cocultures knockout *Saccharomyces cerevisiae* strains. We find that only a modest fraction (of 202) show significant up-regulation to deletion of their duplicate gene. Paralog-responsive proteins match almost exclusively duplicate pairs with which no growth is required for growth. Moreover, media conditions that add or remove a function of a duplicate gene pair specifically eliminate or create paralogous growth. Our results suggest that paralog responsiveness in yeast is need-based and occurs only in conditions in which the gene function is required. Physiologically, such a mechanism could provide an adaptive mechanism for compensation of genetic, environmental, or perturbations in protein abundance.

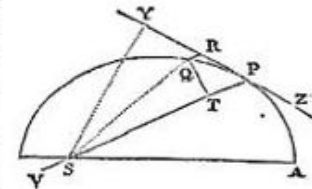
De Motu
Corporum.

48

PHILOSOPHIÆ NATURALIS.

Corol. 4. Hisdem positis, est vis centripeta ut velocitas bis directe, & chorda illa inverse. Nam velocitas est reciproce ut perpendicularum ST per corol. 1. prop. 1.

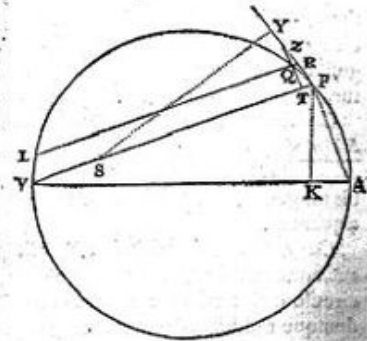
Corol. 5. Hinc si detur figura quævis curvilinea APQ , & in ea detur etiam punctum S , ad quod vis centripeta perpetuo dirigitur, inveniri potest lex vis centripetæ, quæ corpus quodvis P a cursu rectilineo perpetuo retractum in figuræ illius perimetro detinebitur, eamque revolvendo describet. Nimirum computandum est vel solidum $\frac{SPq \times QTq}{QR}$ vel solidum $STq \times PV$ huic vi reciproce proportionale. Ejus rei dabimus exempla in problematis sequentibus.



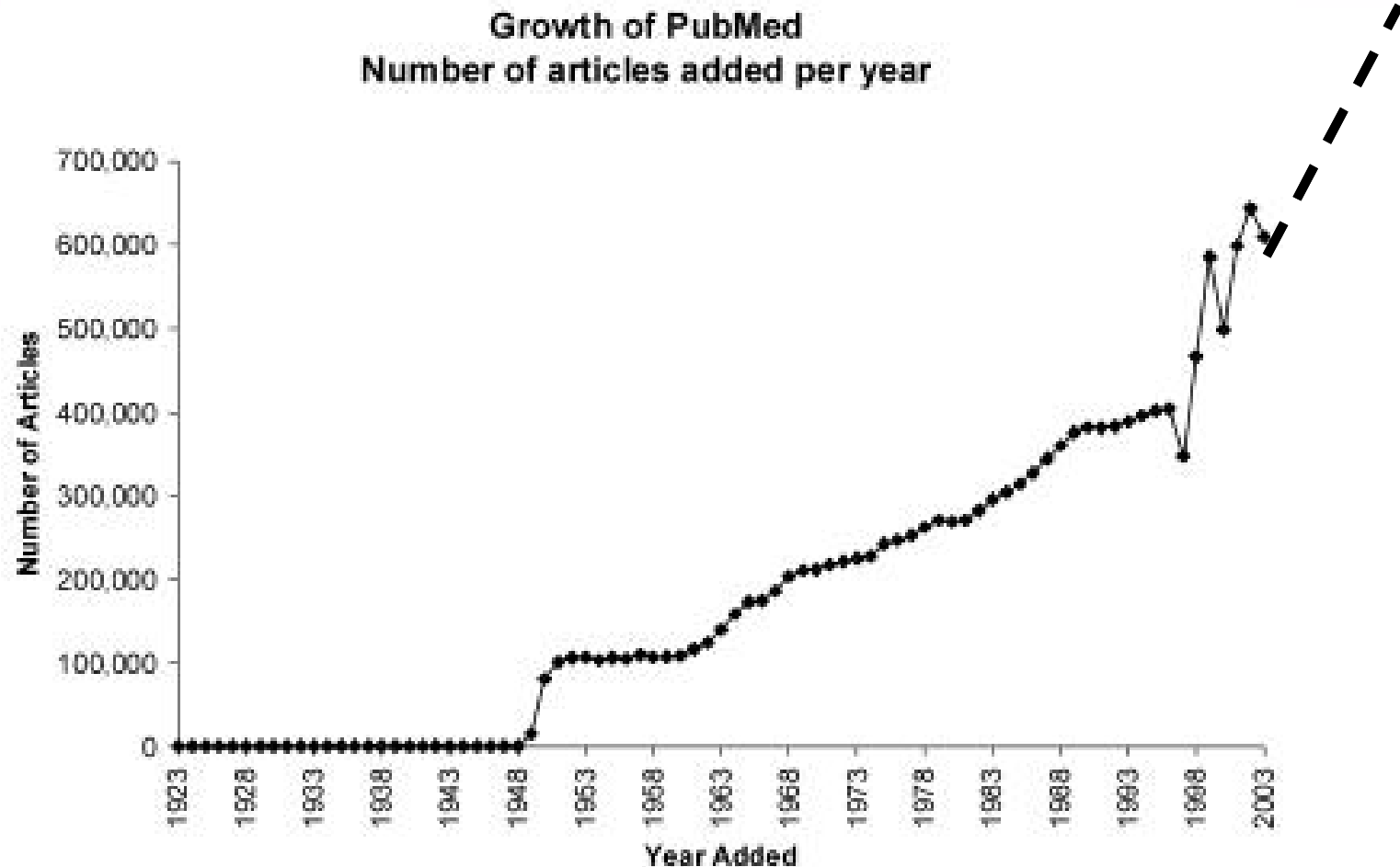
PROPOSITIO VII. PROBLEMA II.

Gyretur corpus in circumferentia circuli, requiritur lex vis centripetæ tendentis ad punctum quodcunque datum.

Est circuli circumferentia $VQPA$; punctum datum, ad quod vis ceu ad centrum suum tendit, S ; corpus in circumferentia latum P ; locus proximus, in quem movebitur Q ; & circuli tangens ad locum priorem PRZ . Per punctum S ducatur chorda PV ; & acta circuli diametro VA , jungatur AP ; & ad SP demittatur perpendicularum QT , quod productum occurrat tangenti PR in Z ; ac denique per punctum Q agatur LR , quæ ipsi SP parallela sit, & occurrat tum circulo in L , tum tangenti PZ in R . Et ob similia triangula ZQR , ZTP , VPA ; erit RP quad. hoc est QRL ad QT quad.

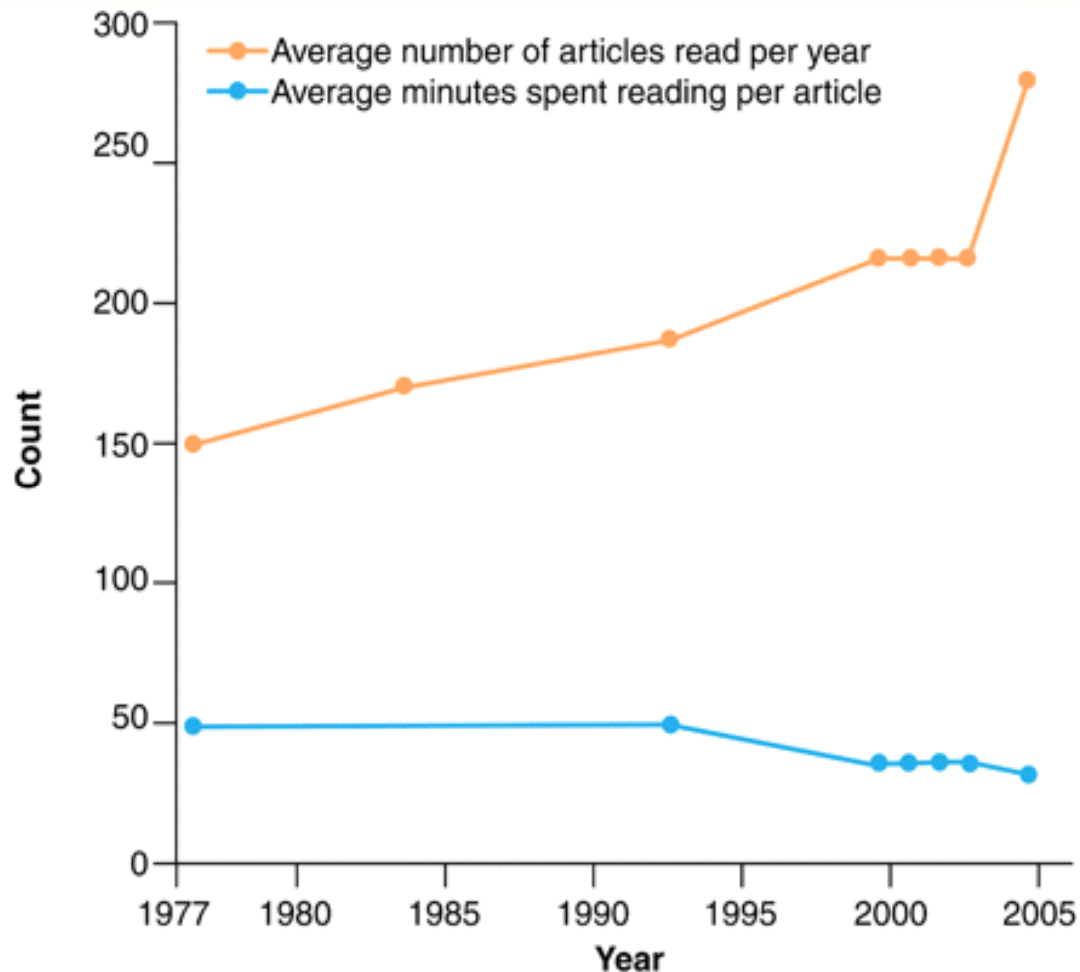


Content Explosion



Drivers of Change :Renear & Palmer 2009 Science 325:828-832

We Are Scanning More Reading Less



Drivers of Change :Renear & Palmer 2009 Science 325:828-832

The Future is Now

The screenshot displays the Nature Science website interface. At the top, the "nature" logo is prominent, with the tagline "International weekly journal of science". Navigation links include "Subscribe", "Register", "Submit manuscript", and "My account". Below the logo, the "Science" logo is shown, along with "AAAS.ORG", "FEEDBACK", "HELP", and "LIBRARIANS". A search bar is present with the text "Science Magazine" and a "SEARCH" button. The main content area features a "Cardiosource" banner for the "American College of Cardiology". Below this, a "Cardiosource Video Network" section is visible, showing a video player with two men discussing "JACC Journals". To the right of the video player, a list of "MOST RECENT VIDEOS" is displayed, including "Mortality Same for Low vs High Volume PCI", "Optimal Dual Antiplatelet Duration", "Review of Trials Presented at AHA 09", "Atorvastatin Reduces MI in PCI", and "Sibutramine & CV Risk". Below the video player, an advertisement for "MULTAQ (dronedarone) Tablets 400mg" is shown, with the text "Now Approved! Now Available!". The bottom of the page features a "PROGRAM GUIDE" with links to "Heart Minute", "CVN NEWS", "CONVERSATIONS WITH EXPERTS", "JACC", and "Interventional Cardiology".

Journal home > Videoarchive in

Science International weekly journal of science

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AAAS NEWS SCIENCE JOURNALS

Science The World's Leading Journal of Original Science

Science Home Current Issue Previous Issues Science Express

Home > Science Magazine > 18 December 2009 > p. 1598

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Cardiosource American College of Cardiology

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Cardiosource Video Network

December 27, 2009

MOST RECENT VIDEOS

1 - 10 >>

12.23.09 Mortality Same for Low vs High Volume PCI 1:58

12.21.09 Optimal Dual Antiplatelet Duration 6:19

12.18.09 Review of Trials Presented at AHA 09 1:30

12.17.09 Atorvastatin Reduces MI in PCI 1:20

12.16.09 Sibutramine & CV Risk 1:56

00:46

EMAIL TO FRIEND JOIN DISCUSSION

ADVERTISEMENT

NEW MULTAQ (dronedarone) Tablets 400mg

Now Approved! Now Available!

Important Safety Information including boxed WARNING

Indications and Usage

MULTAQ is an antiarrhythmic drug indicated to

PRESCRIBING INFORMATION

PROGRAM GUIDE

Heart Minute

CVN NEWS

CONVERSATIONS WITH EXPERTS

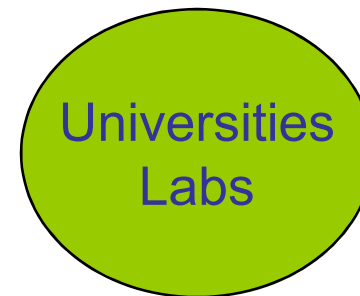
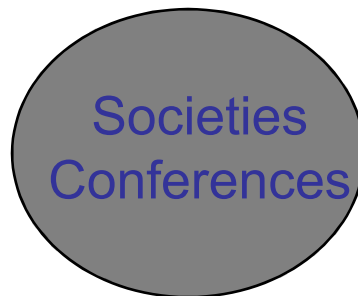
JACC

Interventional Cardiology

What Do We Do?

Provide rich media platform solutions to the STM market

- **Publishing**
- **Distribution**
- **Hosting & repository**



Applications

- Peer review articles
- Supplements
- Conferences
- E-learning
- Book review
- Media
- Public policy
- K-12 outreach

Benefits

STM institutions need to have integrated multimedia online presence to retain and grow audiences

Authors & Viewers

- More engaged
- Higher retention
- More productive
- Broader recognition

Publishers

- Higher article views, traffic, & longer stays
- Expand audience & impact
- Promote authors
- New products & monetization

SciVee Platform

Enable video to be integral part of online presence

- Easy, fast and cost-effective
- All done on SciVee site in browser
- No special equipment or software needed
- Minimal resources needed by publishers
- Simple QA/peer-review facility
- Easily integrated into publishing workflow

Services

Free

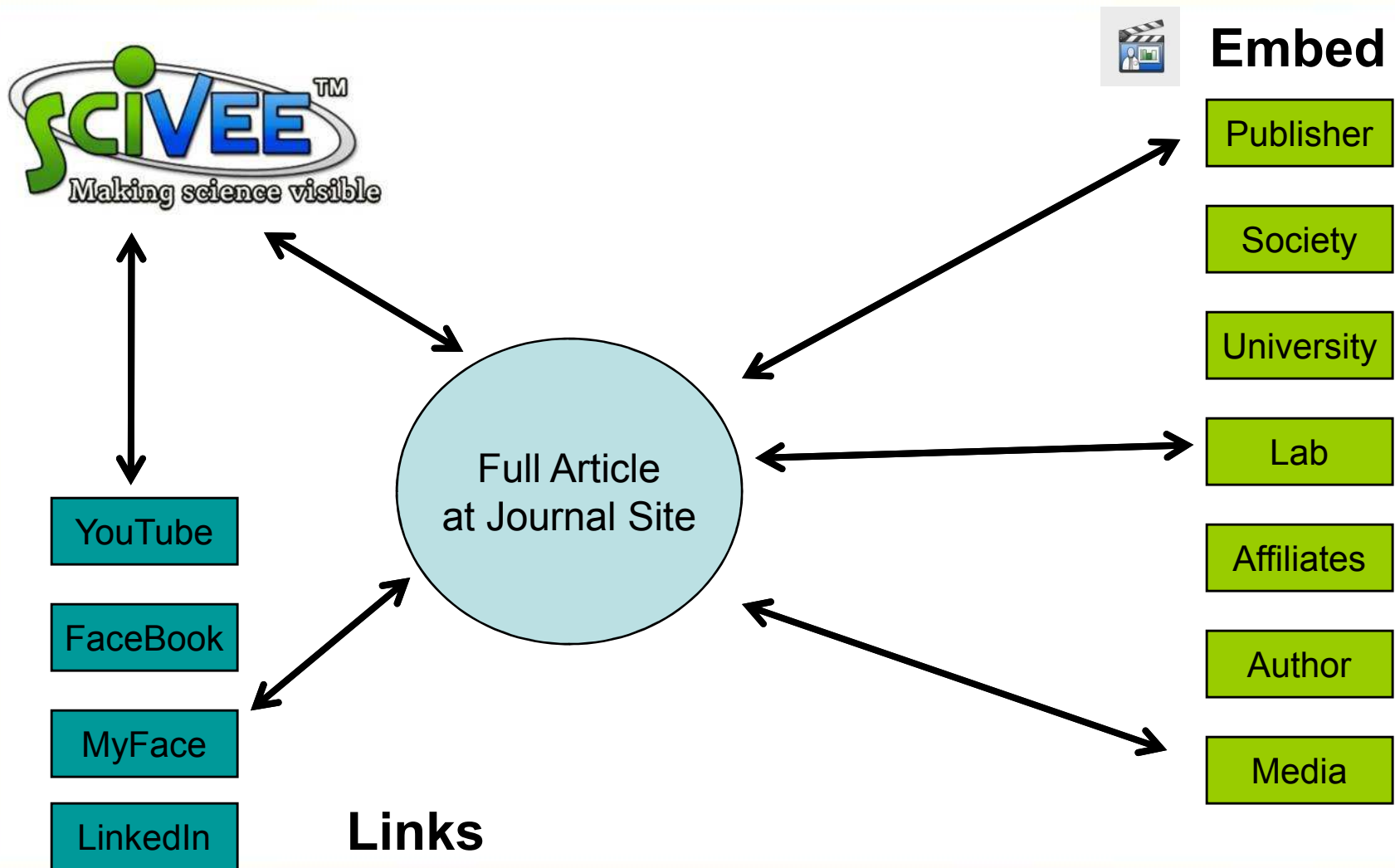
- Upload videos
- View videos
- Create communities

Subscription

- SciveeCasts
- Channel
- Workflow

www.scivee.tv

Drive Viral Distribution



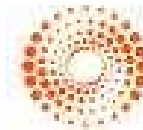
Selected Users

ELSEVIER

AMERICAN JOURNAL OF
Preventive Medicine

A Journal of the
American College of Preventive Medicine &
Association for Prevention Teaching and Research

 **The American Journal of
CLINICAL NUTRITION**



THOMSON REUTERS

PEDIATRICS

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

JN THE
JOURNAL
OF NUTRITION



American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™



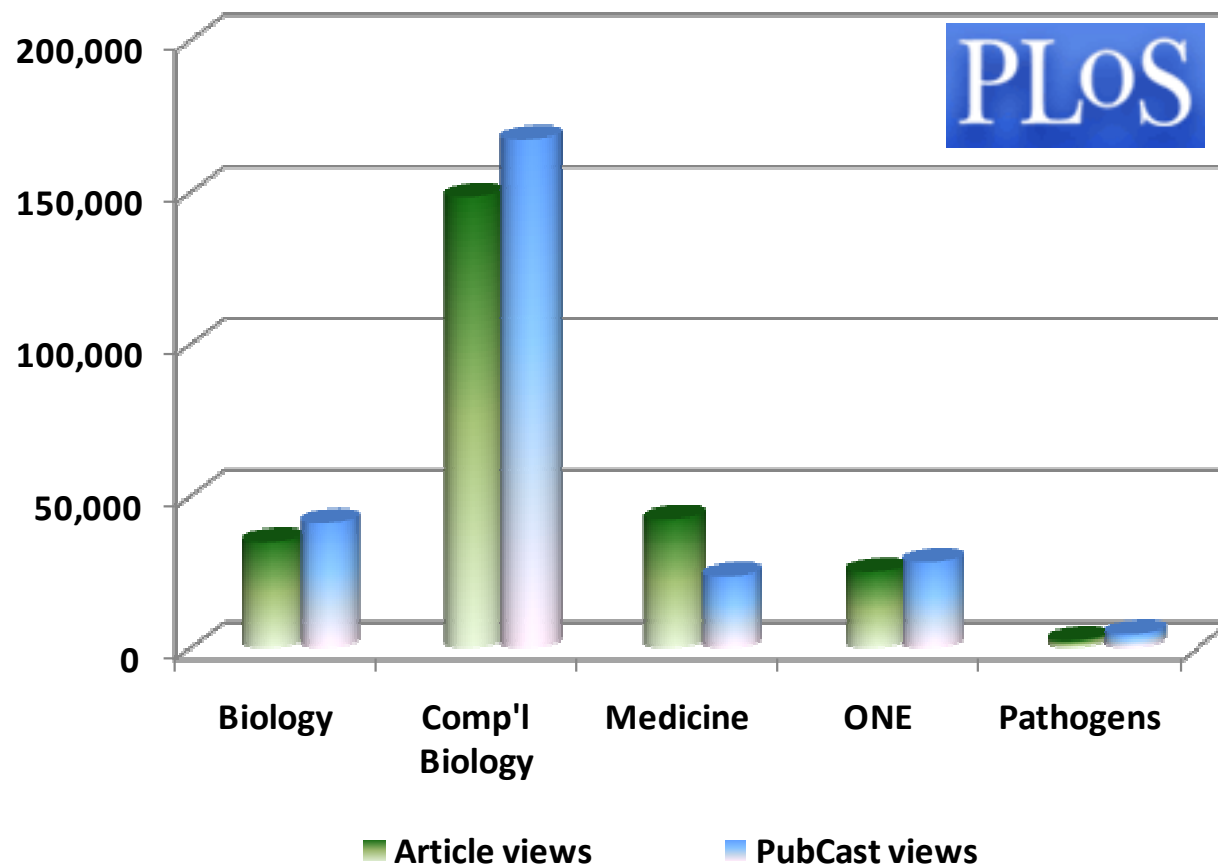
Committed to the attainment of optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults.



The Association for Research in Vision and Ophthalmology
Promoting Sight-Saving Research Globally

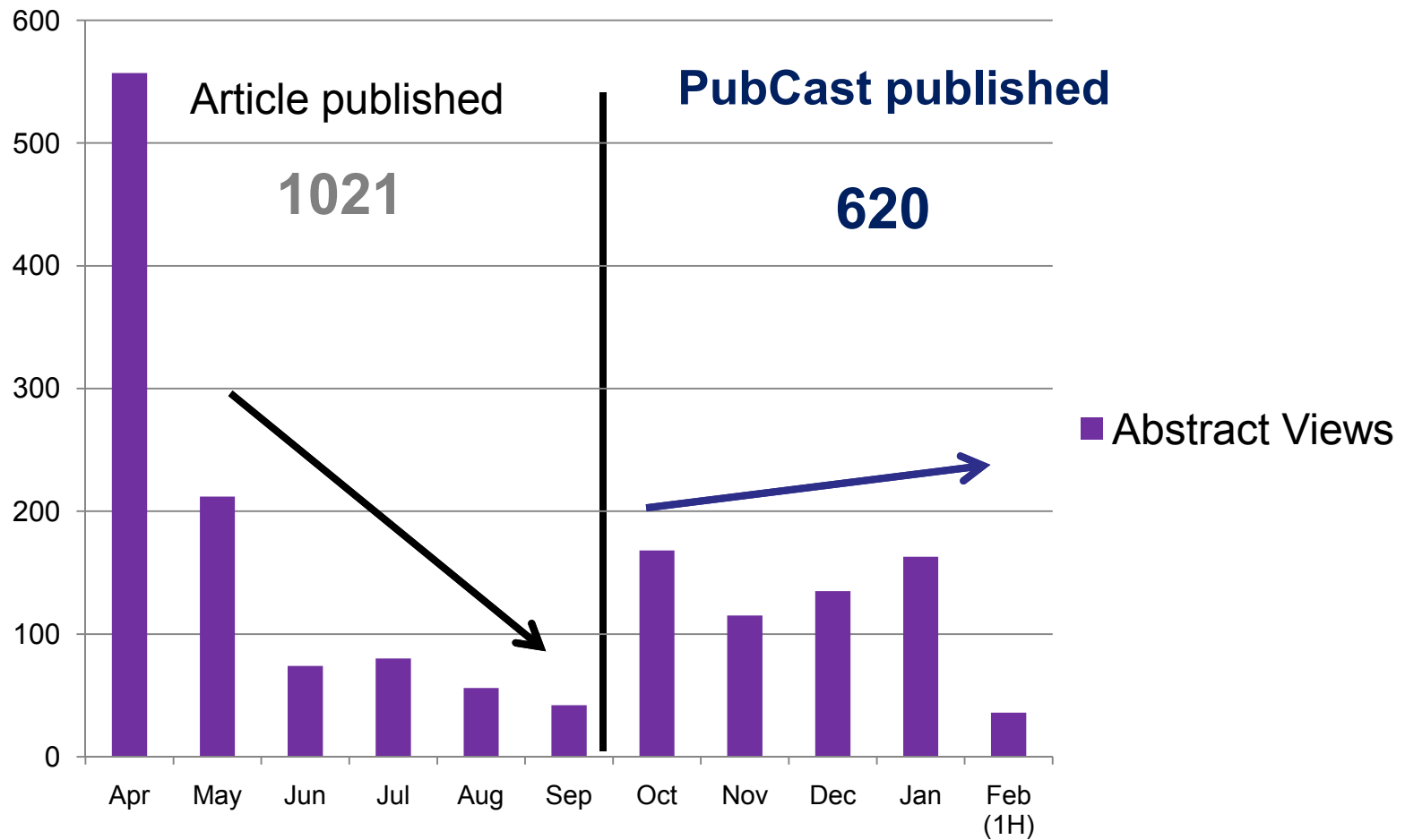
journal of **VISION**

Double Online Views



Basis: 26 editions over 24 months

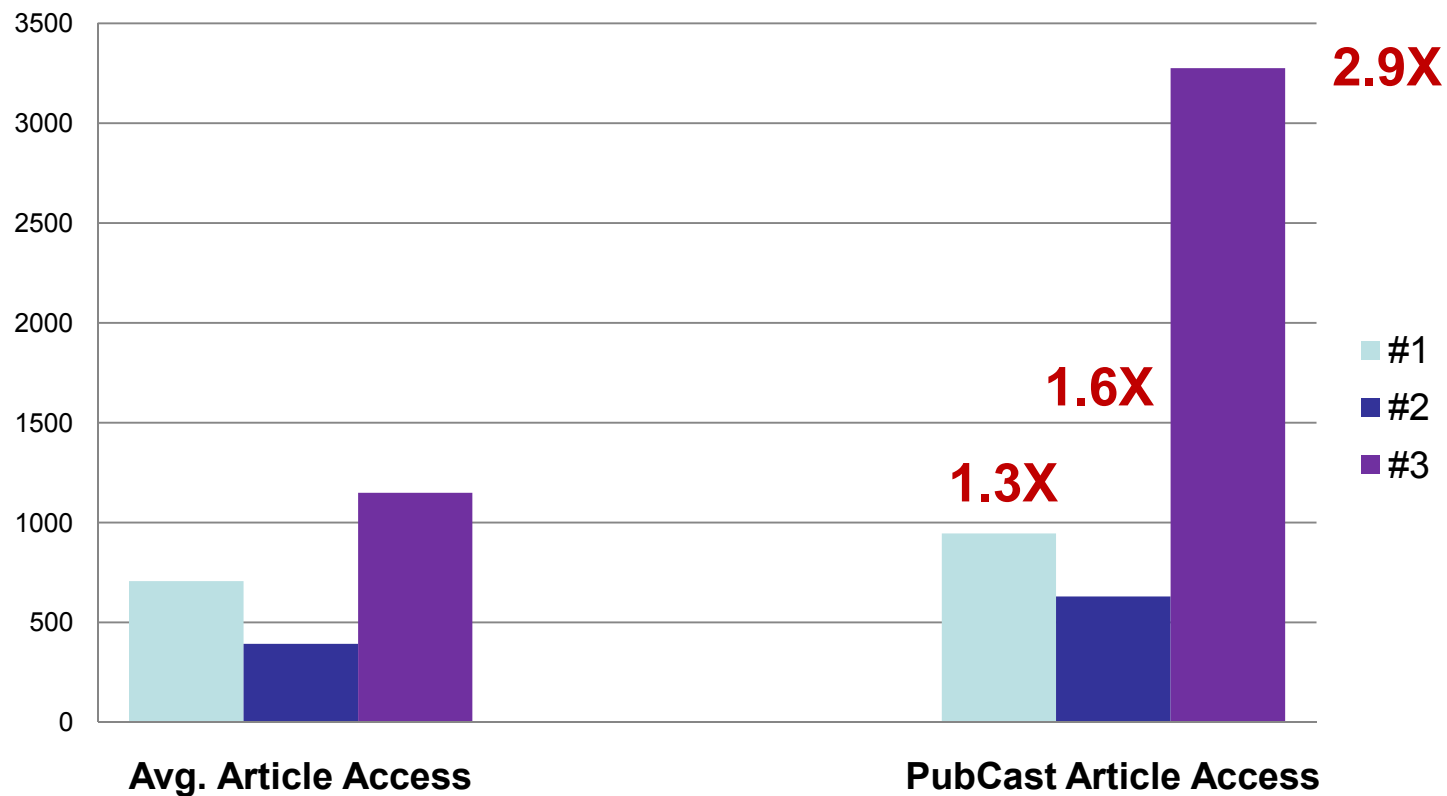
Generate New Readers



Source: Journal 1, PubCast #1

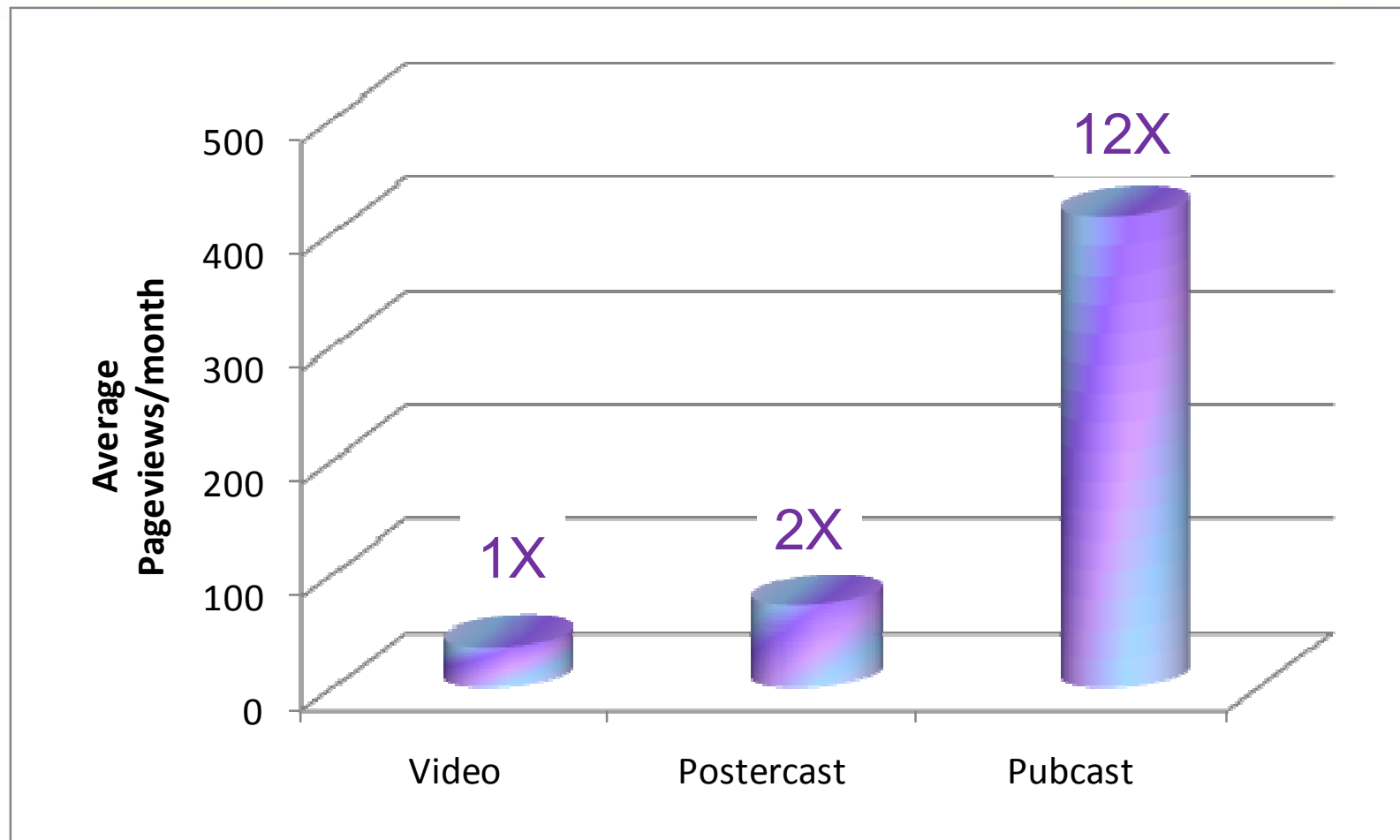
Driving Abstract Views

PubCasted vs. Non-PubCasted Abstract Views



Source: Journals 1 & 2

PubCasts Drive Pageviews



Source: SciVee website, March 2010

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